

Supplementary Tables

Supplementary Table 1 Detectability of Chemicals by Work Category

Comment Code	Chemical Name	Non-Farmworkers			Farmworkers			p-value
		Below LOD	Above LOD	% Above LOD	Below LOD	Above LOD	% Above LOD	
LBXPDE	p,p'-DDE	7	4455	99.84	-	274	100.00	1.000
URX14D	2,5-Dichlorophenol	157	8513	98.19	7	278	97.54	0.369
URXDCB	2,4-Dichlorophenol	1076	7594	87.59	42	243	85.26	0.237
LBXTNA	Trans-nonachlor	609	3828	86.27	25	245	90.74	0.035
URXCPF	Chlorpyrifos	903	5536	85.98	47	216	82.13	0.086
URXCPM	3,5,6-Trichloropyridinol	903	5536	85.98	47	216	82.13	0.086
URXCPO	Chlorpyrifos-oxon	903	5536	85.98	47	216	82.13	0.086
URXDEA	Deet Acid	1327	5811	81.41	28	164	85.42	0.187
URXOPM	3-Phenoxybenzoic acid	1537	6501	80.88	71	243	77.39	0.126
LBXOXY	Oxychlorane	1036	3134	75.16	37	219	85.55	8.87 e-05
URXPAR	4-Nitrophenol	2049	5862	74.10	130	175	57.38	7.50 e-10
LBXDIE	Dieldrin	849	2144	71.63	51	144	73.85	0.566
LBXBHC	Beta-hexachlorocyclohexane	1350	3067	69.44	53	215	80.22	1.48 e-04
URX24DCP	2,4-Dichlorophenoxyacetic acid	3713	5825	61.07	165	227	57.91	0.224
LBXHPE	Heptachlor Epoxide	1950	2171	52.68	107	153	58.85	0.055
LBXPDT	p,p'-DDT	2164	2047	48.61	109	155	58.71	1.49 e-03
<i>Below 48% Detectable</i>								
URXCCC	Cis Dichlorovnl-Dimeth Carboacid	1667	1040	38.42	101	64	38.79	0.934
LBXHCB	Hexachlorobenzene	2703	1572	36.77	167	99	37.22	0.896
URXALA	Alachlor mercapture	613	334	35.27	31	17	35.42	1.000
URXPCP	Pentachlorophenol	1016	486	32.36	51	29	36.25	0.465
URX1TB	2,4,5-Trichlorophenol	4781	2221	31.72	156	84	35.00	0.291
LBXMIR	Mirex	3107	1248	28.66	196	73	27.14	0.627
URX3TB	2,4,6-Trichlorophenol	5003	1999	28.55	177	63	26.25	0.468
URXMAL	Malathion Diacid	2079	783	27.36	82	33	28.70	0.750

URXOPP	O-Phenyl Phenol	5227	1775	25.35	168	72	30.00	0.114
URXOXY	Oxypyrimidine	4226	1121	20.97	121	26	17.69	0.410
URXTCC	Desisopropyl Atrazine	6348	1593	20.06	240	70	22.58	0.279
URXDIZ	Oxypyrimidine	2268	362	13.76	152	13	7.88	0.033
URXDHD	Desethyl Hydroxy Deet	6345	808	11.30	157	33	17.37	0.015
URXETU	Ethylenethio urea	4453	428	8.77	161	12	6.94	0.492
URX4FP	Fluoro-Phenoxybenzoic acid	7478	591	7.32	296	16	5.13	0.180
URXDEE	DEET	9264	618	6.25	327	33	9.17	0.036
URXDPY	Diethylaminomethylpyrimidinol/One	1616	106	6.16	109	6	5.22	0.841
URXMET	Metolachlor Mercapturate	1690	65	3.70	116	4	3.33	1.000
URXCMH	Chloro-Hydro-Meth-Chromen-One/ OI	1647	62	3.63	114	3	2.56	0.796
LBXODT	o,p'-DDT	4029	139	3.33	251	11	4.20	0.478
URXCBF	Carbofuranphenol	4109	129	3.04	237	9	3.66	0.567
URX25T	2,4,5-Trichlorophenoxyacetic acid	5926	165	2.71	310	6	1.90	0.476
URXACE	Acetochlor Mercapturate	1686	43	2.49	118	1	0.84	0.361
URXAPE	Acephate	4919	92	1.84	179	4	2.19	0.582
LBXGHC	Gamma-hexachlorocyclohexane	4240	70	1.62	258	8	3.01	0.135
URXATZ	Atrazine mercapture	4399	50	1.12	206	4	1.90	0.307
URXCB3	Deisopropyl Atrazine Mercapture	4474	36	0.80	223	2	0.89	0.702
URXDCZ	Diaminochloroatrazine	1821	7	0.38	45	1	2.17	0.181
URXPPX	2-Isopropoxyphenol	4163	16	0.38	237	4	1.66	0.021
URXMMI	Methamidaphos	5004	19	0.38	176	1	0.56	0.500
URXMTO	Dimethoate	5080	13	0.26	182	-	0.00	1.000
URXPTU	Propylenethio urea	5086	9	0.18	185	-	0.00	1.000
LBXALD	Aldrin	3063	5	0.16	196	1	0.51	0.312
URXEMM	Ethametsulfuron Methyl	4902	8	0.16	176	-	0.00	1.000
URXNOS	Nicosulfuron	4845	7	0.14	176	-	0.00	1.000
URXDTZ	Desethyl Atrazine	1753	2	0.11	44	1	2.22	0.073
LBXEND	Endrin	2913	3	0.10	191	1	0.52	0.225
URXSIS	Desisopropyl Atrazine	1722	1	0.06	44	-	0.00	1.000
URXSIM	Desisopropyl Atrazine Mercapturate	1752	1	0.06	45	1	2.17	0.051
URXOMO	O-methoate	5097	2	0.04	182	-	0.00	1.000

URXCHS	Chloro Sulfuron	4725	1	0.02	169	-	0.00	1.000
URXMTM	Metsulfuron Methyl	4964	1	0.02	180	-	0.00	1.000
URXSSF	Sulfosulfuron	4999	1	0.02	181	-	0.00	1.000
URXOXS	Oxasulfuron	5013	1	0.02	181	-	0.00	1.000
URXAAZ	Atrazine	1828	-	0.00	46	-	0.00	1.000
URXBSM	Bensulfuron Methyl	4974	-	0.00	181	-	0.00	1.000
URXFRM	Foramsulfuron	4780	-	0.00	174	-	0.00	1.000
URXHLS	Halosulfuron	4903	-	0.00	181	-	0.00	1.000
URXMSM	Mesosulfuron Methyl	5020	-	0.00	181	-	0.00	1.000
URXPIM	Primisulfuron Methyl	4735	-	0.00	174	-	0.00	1.000
URXPRO	Prosulfuron	4843	-	0.00	176	-	0.00	1.000
URXRIM	Rimsulfuron	4938	-	0.00	175	-	0.00	1.000
URXSMM	Sulfometuron Methyl	4759	-	0.00	169	-	0.00	1.000
URXTHF	Thifensulfuron Methyl	4974	-	0.00	179	-	0.00	1.000
URXTRA	Triasulfuron	4872	-	0.00	178	-	0.00	1.000
URXTRN	Triflusulfuron Methyl	4967	-	0.00	183	-	0.00	1.000

Data obtained from NHANES, an abbreviation for the National Health and Nutrition Examination Survey, a cross-sectional study of people residing in the United States and maintained by the Centers for Disease Control and Prevention. The above chemicals are included based on respondent (unique SEQN) who also had occupation data and laboratory results data collected.

Supplementary Table 2 Non-parametric Wilcoxon-Mann-Whitney U Table

Chemical/ Comparison	Weights	ESS	N	t	Df	ROC	p	p FDR	
β-Hexachlorocyclohexane A									
Farmworker vs Non	All	261	4685	1.9292	43	0.5605	0.0603	0.1086	
Non-US Citizen vs US Citizen	All	620	6129	13.9573	43	0.7152	1.4276e-17	5.1394e-16	*
Dieldrin									
Farmworker vs Non	All	194	3188	0.8164	29	0.5267	0.4209	0.4736	
Non-US Citizen vs US Citizen	All	420	4109	-3.0742	29	0.4098	4.5658e-03	0.0110	*
Heptachlor Epoxide									
Farmworker vs Non	All	253	4381	1.3660	43	0.5371	0.1790	0.2482	
Non-US Citizen vs US Citizen	All	586	5799	-3.3394	43	0.4812	1.7426e-03	5.2279e-03	*
p,p'-DDE									
Farmworker vs Non	All	267	4736	1.5872	43	0.5605	0.1198	0.1960	
Non-US Citizen vs US Citizen	All	625	6202	9.4831	43	0.7194	4.2143e-12	7.5857e-11	*
p,p'-DDT									
Farmworker vs Non	All	255	4475	-0.5800	43	0.5292	0.5650	0.6163	
Non-US Citizen vs US Citizen	All	595	5937	6.5620	43	0.6902	5.5614e-08	6.6736e-07	*
2,4-Dichlorophenoxyacetic Acid									
Farmworker vs Non	All	355	9926	2.2979	91	0.5230	0.0239	0.0452	*
Non-US Citizen vs US Citizen	All	1549	15120	-3.2651	91	0.4671	1.5428e-03	5.0491e-03	*
DEET Acid									
Farmworker vs Non	All	158	7328	1.7931	63	0.5634	0.0778	0.1333	
Non-US Citizen vs US Citizen	All	1018	10343	-3.1475	63	0.4368	2.5154e-03	6.9657e-03	*
3-Phenoxybenzoic Acid									
Farmworker vs Non	All	267	8349	-0.4472	76	0.4585	0.6560	0.6946	
Non-US Citizen vs US Citizen	All	1326	12784	-1.1166	76	0.4800	0.2677	0.3323	
4-Nitrophenol									
Farmworker vs Non	All	260	8213	-4.3256	76	0.4141	4.5680e-05	2.7408e-04	*
Non-US Citizen vs US Citizen	All	1308	12614	2.4865	76	0.5266	0.0151	0.0302	*
3,5,6-Trichloropyridinol									
Farmworker vs Non	All	219	6699	0.2903	59	0.5093	0.7726	0.7947	
Non-US Citizen vs US Citizen	All	1082	10368	-3.0750	59	0.4608	3.1867e-03	8.1943e-03	*

2,5-Dichlorophenol									
Farmworker vs Non	All	256	8953	-0.8212	78	0.4957	0.4140	0.4736	
Non-US Citizen vs US Citizen	All	1192	12885	5.4372	78	0.5827	6.0034e-07	5.4030e-06	*
Farmworker vs Non	Sub A	45	1712	-1.2505	16	0.4403	0.2291	0.2946	
Non-US Citizen vs US Citizen	Sub A	264	2474	4.0748	16	0.5858	8.8191e-04	3.5276e-03	*
Farmworker vs Non	Sub B	116	5550	-0.2446	46	0.5093	0.8079	0.8079	
Non-US Citizen vs US Citizen	Sub B	699	7890	3.7415	46	0.5880	5.0636e-04	2.5898e-03	*
Farmworker vs Non	Sub C	95	1691	-1.4778	14	0.4550	0.1616	0.2424	
Non-US Citizen vs US Citizen	Sub C	242	2521	3.0665	14	0.5820	8.3706e-03	0.0188	*
2,4-Dichlorophenol									
Farmworker vs Non	All	256	8953	-1.0113	78	0.5106	0.3150	0.3780	
Non-US Citizen vs US Citizen	All	1192	12885	4.8235	78	0.5753	6.8516e-06	4.9332e-05	*
Farmworker vs Non	Sub A	45	1712	-1.5022	16	0.4997	0.1525	0.2387	
Non-US Citizen vs US Citizen	Sub A	264	24747	3.8880	16	0.5861	1.3064e-03	4.7030e-03	*
Farmworker vs Non	Sub B	116	5550	1.3228	46	0.5528	0.1924	0.2566	
Non-US Citizen vs US Citizen	Sub B	699	7890	3.6993	46	0.5860	5.7552e-04	2.5898e-03	*
Farmworker vs Non	Sub C	95	1691	-2.8901	14	0.4311	0.0119	0.0251	*
Non-US Citizen vs US Citizen	Sub C	242	2521	1.4139	14	0.5440	0.1793	0.2482	

Wilcoxon-Mann-Whitney U ranks molarity of chemicals to inquire if two groups are statistically different from one another. Chemicals are considered here as the log molarity of the chemical ($\mu\text{mol/L}$) for blood measurements and log ratio of the molarity of the chemical with the log molarity of creatine ($\mu\text{mol/L}$) for urinary measurements.

Supplementary Table 3 Unadjusted Logistic Regression Table

Chemical & Comparison	Weights	ESS	N	OR (95% CI)		t	ROC	p	p FDR
β-Hexachlorocyclohexane A									
Farmworker vs Non	All	261	4685	1.24	(0.91, 1.70)	1.40	0.51	0.17	0.27
Non-US Citizen vs US Citizen	All	342	6129	3.27	(2.66, 4.03)	11.58	0.54	8.49e-15	2.21e-13 *
Dieldrin									
Farmworker vs Non	All	194	3188	-	-	-	-	-	-
Non-US Citizen vs US Citizen	All	250	4109	-	-	-	-	-	-
Heptachlor Epoxide									
Farmworker vs Non	All	253	4381	-	-	-	-	-	-
Non-US Citizen vs US Citizen	All	334	5799	-	-	-	-	-	-
p,p'-DDE									
Farmworker vs Non	All	267	4736	1.23	(0.81, 1.85)	0.99	0.51	0.33	0.47
Non-US Citizen vs US Citizen	All	350	6202	4.31	(2.63, 7.05)	5.98	0.53	3.96e-07	2.06e-06 *
p,p'-DDT									
Farmworker vs Non	All	255	4475	1.55	(0.52, 4.65)	0.81	0.51	0.42	0.54
Non-US Citizen vs US Citizen	All	336	5937	31.16	(13.38, 72.55)	8.21	0.82	2.42e-10	3.15e-09 *
2,4-Dichlorophenoxyacetic Acid									
Farmworker vs Non	All	330	9460	4.14	(2.60, 6.60)	6.04	0.54	3.27e-08	2.12e-07 *
Non-US Citizen vs US Citizen	All	527	14636	0.93	(0.66, 1.30)	-0.45	0.50	0.65	0.77
DEET Acid									
Farmworker vs Non	All	158	7330	2.39	(1.01, 5.63)	2.03	0.51	0.05	0.10
Non-US Citizen vs US Citizen	All	220	10346	0.73	(0.50, 1.06)	-1.68	0.51	0.10	0.18
3-Phenoxybenzoic Acid									
Farmworker vs Non	All	241	7864	-	-	-	-	-	-
Non-US Citizen vs US Citizen	All	395	12279	-	-	-	-	-	-
4-Nitrophenol									
Farmworker vs Non	All	234	7738	0.63	(0.43, 0.93)	-2.34	0.51	0.02	0.06
Non-US Citizen vs US Citizen	All	386	12120	1.19	(1.00, 1.40)	2.04	0.51	0.04	0.10
3,5,6-Trichloropyridinol									
Farmworker vs Non	All	193	6220	-	-	-	-	-	-
Non-US Citizen vs US Citizen	All	329	9870	-	-	-	-	-	-

2,5-Dichlorophenol										
Farmworker vs Non	All	256	8955	1.04	(0.75, 1.44)	0.24	0.50	0.81	0.90	
Non-US Citizen vs US Citizen	All	368	12890	2.02	(1.61, 2.54)	6.15	0.53	3.11e-08	2.12e-07	*
Farmworker vs Non	Sub A	45	1713	0.48	(0.19, 1.19)	-1.71	0.51	0.11	0.18	
Non-US Citizen vs US Citizen	Sub A	65	2476	2.26	(1.45, 3.52)	3.89	0.54	1.30e-03	3.76e-03	*
Farmworker vs Non	Sub B	116	5550	1.29	(0.75, 2.21)	0.93	0.50	0.36	0.49	
Non-US Citizen vs US Citizen	Sub B	163	7890	2.14	(1.60, 2.87)	5.28	0.53	3.39e-06	1.47e-05	*
Farmworker vs Non	Sub C	95	1692	0.84	(0.53, 1.33)	-0.81	0.50	0.43	0.54	
Non-US Citizen vs US Citizen	Sub C	141	2524	1.76	(1.00, 3.10)	2.13	0.52	0.05	0.10	
2,4-Dichlorophenol										
Farmworker vs Non	All	256	8955	0.97	(0.55, 1.70)	-0.12	0.50	0.90	0.90	
Non-US Citizen vs US Citizen	All	368	12890	2.63	(1.52, 4.54)	3.50	0.55	7.63e-04	2.48e-03	*
Farmworker vs Non	Sub A	45	1713	-	-	-	-	-	-	
Non-US Citizen vs US Citizen	Sub A	65	2476	-	-	-	-	-	-	
Farmworker vs Non	Sub B	116	5550	0.92	(0.28, 3.06)	-0.13	0.50	0.89	0.90	
Non-US Citizen vs US Citizen	Sub B	163	7890	3.76	(1.94, 7.30)	4.02	0.58	2.12e-04	7.87e-04	*
Farmworker vs Non	Sub C	95	1692	1.06	(0.47, 2.36)	0.14	0.50	0.89	0.90	
Non-US Citizen vs US Citizen	Sub C	141	2524	1.83	(0.69, 4.84)	1.34	0.53	0.20	0.31	

Logistic model testing the odds of having a bioactive measurement of a given chemical. A bioactive measurement is defined as a positive hit call.

Supplementary Table 4 Adjusted Logistic Regression Table

Chemical & Comparison	Weights	ESS	N	OR (95% CI)		t	ROC	p	p FDR
β-Hexachlorocyclohexane A									
Farmworker vs Non	All	253	4570	0.99	(0.63, 1.55)	-0.03	0.88	0.97	0.97
Non-US Citizen vs US Citizen	All	332	5982	8.50	(5.45, 13.24)	9.84	0.90	4.75e-11	1.23e-09 *
Dieldrin									
Farmworker vs Non	All	187	3092	-	-	-	-	-	-
Non-US Citizen vs US Citizen	All	241	3988	-	-	-	-	-	-
Heptachlor Epoxide									
Farmworker vs Non	All	253	4272	-	-	-	-	-	-
Non-US Citizen vs US Citizen	All	334	5659	-	-	-	-	-	-
p,p'-DDE									
Farmworker vs Non	All	267	4620	0.93	(0.63, 1.36)	-0.39	0.79	0.70	0.89
Non-US Citizen vs US Citizen	All	350	6054	2.98	(1.69, 5.29)	3.90	0.81	4.80e-04	3.12e-03 *
p,p'-DDT									
Farmworker vs Non	All	247	4362	1.49	(0.51, 4.35)	0.75	0.90	0.46	0.76
Non-US Citizen vs US Citizen	All	326	5792	10.77	(3.63, 31.95)	4.46	0.92	1.00e-04	8.70e-04 *
2,4-Dichlorophenoxyacetic Acid									
Farmworker vs Non	All	321	9326	4.33	(2.73, 6.87)	6.31	0.73	1.55e-08	2.01e-07 *
Non-US Citizen vs US Citizen	All	494	13941	1.05	(0.69, 1.61)	0.23	0.70	0.82	0.93
DEET Acid									
Farmworker vs Non	All	157	7253	2.23	(0.97, 5.13)	1.94	0.65	0.06	0.22
Non-US Citizen vs US Citizen	All	212	9928	0.89	(0.62, 1.27)	-0.66	0.64	0.51	0.76
3-Phenoxybenzoic Acid									
Farmworker vs Non	All	234	7763	-	-	-	-	-	-
Non-US Citizen vs US Citizen	All	371	11679	-	-	-	-	-	-
4-Nitrophenol									
Farmworker vs Non	All	228	7639	0.57	(0.38, 0.87)	-2.69	0.76	9.15e-03	0.04 *
Non-US Citizen vs US Citizen	All	362	11523	1.17	(0.95, 1.44)	1.53	0.75	0.13	0.37
3,5,6-Trichloropyridinol									
Farmworker vs Non	All	187	6139	-	-	-	-	-	-
Non-US Citizen vs US Citizen	All	307	9388	-	-	-	-	-	-

2,5-Dichlorophenol									
Farmworker vs Non	All	251	8832	1.01	(0.75, 1.35)	0.06	0.73	0.95	0.97
Non-US Citizen vs US Citizen	All	351	12400	1.35	(1.02, 1.79)	2.16	0.73	0.03	0.15
Farmworker vs Non	Sub A	43	1681	0.63	(0.23, 1.73)	-1.27	0.71	0.27	0.54
Non-US Citizen vs US Citizen	Sub A	61	2377	1.73	(0.88, 3.43)	2.25	0.71	0.09	0.29
Farmworker vs Non	Sub B	115	5490	1.04	(0.64, 1.72)	0.18	0.73	0.86	0.93
Non-US Citizen vs US Citizen	Sub B	157	7607	1.24	(0.87, 1.79)	1.23	0.74	0.23	0.54
Farmworker vs Non	Sub C	93	1657	1.09	(0.45, 2.63)	0.41	0.74	0.72	0.89
Non-US Citizen vs US Citizen	Sub C	133	2416	1.30	(0.31, 5.57)	0.79	0.73	0.51	0.76
2,4-Dichlorophenol									
Farmworker vs Non	All	251	8832	0.86	(0.48, 1.54)	-0.51	0.79	0.61	0.83
Non-US Citizen vs US Citizen	All	351	12400	1.51	(0.72, 3.17)	1.11	0.78	0.27	0.54
Farmworker vs Non	Sub A	43	1681	-	-	-	-	-	-
Non-US Citizen vs US Citizen	Sub A	61	2377	-	-	-	-	-	-
Farmworker vs Non	Sub B	115	5490	0.69	(0.21, 2.26)	-0.64	0.85	0.53	0.76
Non-US Citizen vs US Citizen	Sub B	157	7607	2.07	(0.77, 5.56)	1.50	0.84	0.14	0.37
Farmworker vs Non	Sub C	93	1657	1.54	(0.26, 8.93)	1.05	0.80	0.40	0.75
Non-US Citizen vs US Citizen	Sub C	133	2416	0.81	(0.05, 13.99)	-0.32	0.77	0.78	0.92

Logistic model testing the odds of having a bioactive measurement of a given chemical. Adjusted model includes adjustments for BMI, age, gender, education, and ethnicity. Log molarity of creatine is also added for urinary measurements.

Supplementary Table 5 Adjusted Linear Regression Table

Chemical & Comparison	Weights	ESS	N	β (95% CI)		t	R ²	ρ	ρ FDR	
β-Hexachlorocyclohexane A										
Farmworker vs Non	All	253	4570	-0.02	(-0.31, 0.28)	-0.11	0.39	0.91	0.95	
Non-US Citizen vs US Citizen	All	332	5982	2.99	(1.57, 5.68)	3.47	0.42	1.56e-03	0.01	*
Dieldrin										
Farmworker vs Non	All	187	3092	-0.07	(-0.45, 0.30)	-0.40	0.20	0.69	0.89	
Non-US Citizen vs US Citizen	All	241	3988	0.94	(0.78, 1.13)	-0.70	0.19	0.49	0.80	
Heptachlor Epoxide										
Farmworker vs Non	All	245	4272	0.03	(-0.10, 0.16)	0.47	0.26	0.64	0.86	
Non-US Citizen vs US Citizen	All	323	5659	0.91	(0.77, 1.06)	-1.25	0.27	0.22	0.49	
p,p'-DDE										
Farmworker vs Non	All	259	4620	0.28	(-0.03, 0.58)	1.84	0.36	0.07	0.34	
Non-US Citizen vs US Citizen	All	340	6054	2.51	(1.91, 3.30)	6.89	0.41	1.02e-07	1.83e-06	*
p,p'-DDT										
Farmworker vs Non	All	247	4362	0.17	(-0.22, 0.56)	0.90	0.27	0.38	0.64	
Non-US Citizen vs US Citizen	All	326	5792	4.18	(3.13, 5.60)	10.03	0.35	2.98e-11	1.07e-09	*
2,4-Dichlorophenoxyacetic Acid										
Farmworker vs Non	All	321	9326	0.48	(-0.26, 1.23)	1.29	0.29	0.20	0.48	
Non-US Citizen vs US Citizen	All	494	13941	0.94	(0.75, 1.18)	-0.57	0.24	0.57	0.85	
DEET Acid										
Farmworker vs Non	All	157	7253	-0.03	(-2.38, 1.77)	-0.30	0.46	0.77	0.92	
Non-US Citizen vs US Citizen	All	212	9928	0.91	(0.27, 3.08)	-0.15	0.42	0.88	0.95	
3-Phenoxybenzoic Acid										
Farmworker vs Non	All	234	7763	-0.15	(-0.69, 0.40)	-0.54	0.15	0.59	0.85	
Non-US Citizen vs US Citizen	All	371	11679	0.78	(0.58, 1.06)	-1.61	0.14	0.11	0.41	
4-Nitrophenol										
Farmworker vs Non	All	228	7639	-0.55	(-0.76, -0.35)	-5.35	0.12	1.30e-06	1.55e-05	*
Non-US Citizen vs US Citizen	All	362	11523	1.05	(0.91, 1.21)	0.66	0.11	0.51	0.80	
3,5,6-Trichloropyridinol										
Farmworker vs Non	All	187	6139	-0.11	(-0.34, 0.13)	-0.92	0.33	0.36	0.64	
Non-US Citizen vs US Citizen	All	307	9388	0.91	(0.74, 1.12)	-0.94	0.33	0.35	0.64	

2,5-Dichlorophenol										
Farmworker vs Non	All	251	8832	-0.35	(-0.69, -0.01)	-2.05	0.16	0.04	0.27	
Non-US Citizen vs US Citizen	All	351	12400	1.52	(0.91, 2.53)	1.63	0.16	0.11	0.41	
Farmworker vs Non	Sub A	43	1681	-0.76	(-2.07, 0.54)	-1.62	0.19	0.18	0.48	
Non-US Citizen vs US Citizen	Sub A	61	2377	1.11	(0.37, 3.34)	0.25	0.16	0.81	0.94	
Farmworker vs Non	Sub B	115	5494	-0.05	(-0.55, 0.45)	-0.20	0.20	0.85	0.95	
Non-US Citizen vs US Citizen	Sub B	157	7607	1.71	(0.82, 3.56)	1.48	0.19	0.15	0.48	
Farmworker vs Non	Sub C	93	1657	-0.29	(-1.26, 0.69)	-1.26	0.20	0.33	0.64	
Non-US Citizen vs US Citizen	Sub C	133	2416	1.25	(0.23, 6.87)	0.57	0.17	0.63	0.86	
2,4-Dichlorophenol										
Farmworker vs Non	All	251	8832	-0.42	(-0.72, -0.11)	-2.72	0.17	8.40e-03	0.06	
Non-US Citizen vs US Citizen	All	351	12400	1.28	(0.85, 1.93)	1.21	0.16	0.23	0.49	
Farmworker vs Non	Sub A	43	1681	-0.75	(-1.56, 0.07)	-2.54	0.20	0.06	0.33	
Non-US Citizen vs US Citizen	Sub A	61	2377	1.03	(0.40, 2.67)	0.08	0.17	0.94	0.95	
Farmworker vs Non	Sub B	115	5494	-0.07	(-0.52, 0.38)	-0.32	0.21	0.75	0.92	
Non-US Citizen vs US Citizen	Sub B	157	7607	1.46	(0.82, 2.59)	1.33	0.20	0.19	0.48	
Farmworker vs Non	Sub C	93	1657	-0.45	(-1.35, 0.45)	-2.17	0.18	0.16	0.48	
Non-US Citizen vs US Citizen	Sub C	133	2416	1.02	(0.22, 4.72)	0.07	0.16	0.95	0.95	

Linear model testing the unit change in molarity of a given chemical. Adjusted model includes adjustments for BMI, age, gender, education, and ethnicity. Log molarity of creatine is also added for urinary measurements.

Supplementary Table 6 Toxcast Assay Intended Target Family Frequencies, by Pesticide

Intended Target Family	2,4-D	4-Nitrophenol	β -HCH	p,p'-DDE	p,p'-DDT	Total
cell cycle	7	28	6	74	120	235
nuclear receptor	8	4	12	102	58	184
DNA binding	2	0	3	64	27	96
cytokine	0	0	0	29	33	62
cell adhesion molecules	0	0	0	13	14	27
cell morphology	2	2	1	6	8	19
GPCR	1	0	0	4	4	9
protease	0	1	0	5	3	9
histones	0	0	0	2	2	4
hydrolase	0	2	1	0	1	4
malformation	1	1	0	1	1	4
oxidoreductase	1	3	0	0	0	4
protease inhibitor	0	0	0	2	2	4
steroid hormone	3	1	0	0	0	4
transporter	1	0	0	1	1	3
growth factor	0	0	0	1	1	2
kinase	0	0	0	1	1	2
phosphatase	1	1	0	0	1	3
CYP	0	0	1	0	0	1
misc protein	0	0	0	0	1	1
<i>Total</i>	<i>27</i>	<i>43</i>	<i>24</i>	<i>305</i>	<i>278</i>	<i>677</i>

Focusing on bioactive chemicals only, frequencies of intended target family for each chemical is presented here. Intended target family describes the category of the assay cellular effect. Bioactive is described as having a positive hit-call for the assay.